

XL. *On Anisocentropus, a new Genus of Exotic Trichoptera, with Descriptions of Five Species, and of a new Species of Dipseudopsis.* By R. M'LACHLAN, Esq., F.L.S.

[Read 2nd February, 1863.]

IN the course of a general examination that I made some short time since of the North American *Trichoptera* in the British Museum Collection, I found that the insects described by Mr. Walker under the names of *Notidobia pyraloides*, *N. latifascia* and *Goëra elegans* have no connection with the genera in which they have been placed, nor do they even belong to the *Sericostomidæ*, as is proved by the maxillary palpi of the two sexes being similar in form, the insects of that family being readily distinguished by the great difference that exists in the form of the maxillary palpi in the sexes. It was evident also that the types under the two last names really belonged to the same species, the palpi of *N. latifascia* having been broken off. But what struck me most forcibly was the aberrant numerical arrangement of the tibial spurs, there being one spur less on the posterior than on the intermediate tibiæ, a peculiarity quite singular as far as the *Trichoptera* are concerned.

Dr. Hagen, in his "Synopsis of the North American Neuroptera," places the two last insects in the genus *Leptocerus*, quoting Mr. Walker's descriptions, as he was not well acquainted with the types, and retains the first in the genus *Notidobia*. When in Loudon however, in 1861, he discovered that the species were wrongly placed; but he informs me that he had not noticed the aberrant arrangement of the spurs.

There have lately been received from New Guinea and other islands in the Oriental Archipelago, three other species presenting the same peculiarities and otherwise generically identical, the whole forming a well-marked genus, which I propose to call *Anisocentropus*. One species, *A. illustris*, is perhaps the most beautiful insect in the order, yet described.

Family LEPTOCERIDÆ.

ANISOCENTROPUS, n. g.

Head convex above, ocelli absent; antennæ about twice the

length of the wings, thread-like, basal joint short, bulbous, a tuft of hairs is placed on the underside between the basal joint and the eye; maxillary palpi very long, hairy, not differing in the sexes; 1st and 2nd joints short, of equal length, 3rd longer than the 1st and 2nd united, 4th half the length of the 3rd, terminal joint about as long as the 3rd, flexible; labial palpi small, the joints of about equal length.

Prothorax small, much narrower than the head; mesothorax oval-elongate, broader than the head and flattened above; abdomen not robust.

Legs: femora thin, sub-compressed; tibiæ cylindrical, the posterior tibiæ and tarsi always more or less hairy. Spurs 2. 4. 3; anterior tibiæ with two small spurs at the apex; intermediate tibiæ with two spurs at the apex and two in the middle, the outer spurs in each pair long; posterior tibiæ with one long spur in the middle and two unequal ones at the apex.

Wings rather thickly clothed with short adpressed pubescence: anterior wings short and broad, dilated at the apex, which is obliquely rounded; discoidal cell closed; anastomosis complete, but very irregular; the two apical cells formed by the furcations of the two branches of the *ramus discoidalis*, very long; posterior wings much smaller than the anterior, folded.

In the two American species the hairy covering on the wings is thicker than in the others.

Anisocentropus illustris, n. sp. (Pl. XIX. fig. 1.)

Fuscus, nitidus, sparse ochraceo-pilosus: antennis nigro-fuscis, supra albo-maculatis, infra brunneis, articulo basali ochraceo; capite nitido nigro-fusco; penicillo ochraceo; palpis maxillaribus ochraceis, articulo ultimo fusco; mesothorace nitido fusco, maculâ mediâ nigro-fuscâ ochraceo-marginatâ; abdomine supra fusco, infra vix ochraceo; pedibus anticis omnino ochraceis, tibiis tarsisque intermediis et posticis fuscis, his valde hirsutis; alis anticis nitidis, purpurascenteo-fuscis, bases versus vix ochraceis, strigis maculisque ante medium cyaneis; fasciâ mediâ cuneiformi albido-ochraceâ angulum analem non attingente; posticis fuscis.

Long. corp. $4\frac{1}{2}$ lin.; long. antenn. 10 lin.; exp. alar. 13 lin.

Antennæ blackish-fuscous, the joints above spotted with white, not distinctly annulated, beneath wholly brownish, basal joint ochreous; head above shining blackish-fuscous, with scattered ochreous hairs, the pencil-like tufts ochreous; maxillary palpi ochreous, terminal joint fuscous; prothorax ochreous, hairy;

mesothorax shining fuscous, with a black space in the centre, margined with a ring of short ochreous hairs; abdomen above fuscous, beneath somewhat ochraceous; anterior legs wholly ochreous, the knees and tarsi slightly fuscous; intermediate legs, femora ochreous, tibiæ and tarsi fuscous; posterior legs, femora slightly fuscous, tibiæ and tarsi fuscous, very hairy; anterior wings shining purplish-fuscous, varied at the base with reddish-ochreous, before the middle are some brilliant blue streaks and spots; from the middle of the costa arises an oblique whitish ochreous fascia, broadest at its origin and not reaching the anal angle, extreme apical margin yellowish, ciliæ fuscous; posterior wings wholly fuscous.

Anal appendages.—Male: App. sup. small, rounded, fringed with long hairs, ventral lamina emarginate, penis flat. Female: Dorsal lamina triangular, obtuse at the apex; app. sup. roundly spoon-shaped.

Habitat, Salwatty, near New Guinea (Mr. Allen).

In my own collection and in that of the British Museum.

Anisocentropus dilucidus, n. sp. (Pl. XIX. fig. 2.)

Ochraceus: antennis albidis, articulo basali ochraceo; palpis, thorace, abdomine, pedibusque pallide ochraceis; alis anticis fuscis, ante medium et apicem versus purpureo-suffusis, fasciâ pone medium, angulum analem non attingente, maculâque parvâ ad arculum albidis; posticis dilute fuscis.

Long. corp. $3\frac{1}{2}$ lin.; long. antenn. $9\frac{1}{2}$ lin.; exp. alar. $9\frac{1}{2}$ lin.

Antennæ whitish, unannulated, basal joint ochreous; head, palpi, thorax, abdomen, and legs pale ochreous; anterior wings fuscous, with a purplish reflection, most evident before the middle and towards the apex; a broad whitish band arises from the costa beyond the middle but does not reach the anal angle, at the arculus is a small whitish spot; posterior wings pale fuscous.

Habitat, New Guinea, Island of Mysol (Mr. Allen).

Two specimens in the collection of the British Museum.

Smaller in every way than the preceding and easily distinguishable therefrom. In both species the anterior wings are destitute of hairy covering on those parts of the membrane that are occupied by blue or purple markings.

Anisocentropus immunis, n. sp. (Pl. XIX. fig. 4.)

Dilute ochraceus: antennis pallidis, griseo-brunneo-annulatis; capite, thorace, pedibusque pallide ochraceis; alis anticis dense ochraceo-pubescentibus; posticis hyalinis.

Long. corp. — ?; long. antenn. $10\frac{1}{2}$ lin.; exp. alar. 10 lin.

Antennæ with obscure greyish-brown annulations; head, thorax and legs pale ochreous; anterior wings densely clothed with short ochreous pubescence, costal margin darker; posterior wings hyaline.

Habitat New Guinea (Mr. Allen).

One specimen in the collection of the British Museum.

Anisocentropus latifascia, Walker. (Pl. XIX. fig. 5.)

Notidobia latifascia, Walker, Catalogue of Neuropterous Insects in the British Museum, pt. 1, p. 90, 3.

Goëra elegans, Walker, idem, p. 95, 5.

Leptocerus latifascia, Hagen, Neuroptera of North America, p. 279, 12.

L. elegans, Hag. idem, p. 279, 10.

Testaceus: antennis fuscis dimidio basali flavo-annulato; capite thoraceque testaceis; abdomine vix fuscescente; pedibus testaceis, tibiis tarsisque posticis obscurioribus, hirsutis; alis anticis flavo-ochraceis, pone medium fasciâ latâ brunneâ; posticis griseo-brunneis.

Long. corp. 3 lin.; long. antenn. 9 lin.; exp. alar. 9 lin.

Antennæ fuscous, annulated with yellow in the basal half; head, palpi and thorax testaceous; abdomen somewhat fuscescent; legs testaceous, the posterior tibiæ and tarsi darker and clothed with long hairs; anterior wings yellowish-ochreous, with a broad brownish band beyond the middle, only the inner margin of which is well defined; posterior wings brownish-grey.

Habitat, North America.

In the collection of the British Museum, formerly in that of the Entomological Club.

There is not the slightest doubt as to the types of Mr. Walker's species being identical. See introductory remarks.

Anisocentropus pyraloides, Walker. (Pl. XIX. fig. 3.)

Notidobia pyraloides, Walker, Catalogue of Neuropterous Insects in the British Museum, pt. 1, p. 90, 2; Hagen, Neuroptera of North America, p. 271, 2.

Ferrugineus: antennis ochraceis, bases versus brunneo-annulatis; capite, thorace, abdomineque ferrugineis; pedibus ochraceis; alis anticis et posticis saturate brunneis.

Long. corp. $3\frac{1}{2}$ lin. ♂, 4 lin. ♀; long. antenn. — ?; exp. alar. 9 lin. ♂, 11 lin. ♀.

Antennæ ochreous, annulated with brownish towards the base; head, thorax and abdomen ferruginous; legs ochreous, posterior tibiæ and tarsi with a few long hairs; anterior and posterior wings uniformly dark brown.

Anal appendages.—Male: App. sup. long, finger-shaped, with long hairs at the apex; app. inf. long, obtusely pointed, curved upwards; penis thickened at the apex.

Habitat, Georgia (Mr. Abbott).

Two specimens in the collection of the British Museum.

Family RHYACOPHILIDÆ.

Genus DIPSEUDOPSIS, Walker.

This genus was characterized by Mr. Walker in pt. 1 of the British Museum Catalogue of Neuropterous Insects, p. 91 (1852), from a single specimen from Port Natal (*D. Capensis*), and considered as belonging to the *Sericostomidæ*. Since then a second species (described below) has been received from China; and as the maxillary palpi are five-jointed in both sexes, and present no structural difference, I think it should more properly be referred to the *Rhyacophilidæ*. It is a very distinct genus, with 3. 4. 4 spurs and a remarkable development of the prothorax (especially in the Chinese species), more so than I have observed in any other genus of *Phryganidæ*; this part forms above a very evident collar, deeply divided in the middle.

Dipseudopsis collaris, n. sp. (Pl. XIX. fig. 6.)

Fusca: antennis flavis, brunneo-annulatis; capite fusco, marginibus lateralibus et postice flavidis; prothorace flavo; mesothorace piceo-fusco; abdomine fusco; pedibus flavo-ochraceis; femoribus, tibiis, tarsisque intus concavis; alis anticis stramineis (vel stramineo-fuscis) maculâ albedo-hyalinâ, venis concoloribus; posticis sub-hyalinis, venis flavis.

Long. corp. 6 lin.; exp. alar. 15 lin.

Antennæ yellow, annulated with brown; head fuscous, the lateral and hinder margins yellowish; palpi ochreous, slightly fuscous; prothorax large, conspicuously yellow (sometimes slightly fuscous); mesothorax pitchy fuscous; metathorax testaceous; abdomen fuscous; legs yellowish-ocherous, deeply concave on the inner side; anterior wings straw yellow (sometimes pale fuscous), a whitish spot on the disk, veins concolorous; posterior wings sub-hyaline, veins yellowish. The whole insect is remarkably devoid of hairy covering of any kind.

Habitat, Hong Kong (J. C. Bowring, Esq.) and North China. In the collection of the British Museum.